

**REMARKS**

Applicants respectfully request reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

**Rejections Under 35 USC 102**

Applicants traverse the rejection for anticipation for the following reasons. Saunders merely describes a cured urethane polymer, but fails to teach or suggest the polymer composition according to claim 1 which is not cured, nor does Saunders teach or suggest any process for producing such a urethane polymer. Applicants believe that urethane polymers were being produced by using a solvent at the time of Saunders reference, as described in Elfers (US 3,496,238), which is cited in the previous Office Action. Accordingly, claim 1 does not recite a solvent and has unique characteristics is not anticipated by Saunders.

With respect to the rejection of claims 1-3 for lack of novelty over Beyrle, applicants respectfully submit that this is based on a misinterpretation of the example described in Beyrle. Beyrle describes a polyurethane composition consisting of diisocyanate, polypropylene glycol having a molecular weight of 440 and 1,4-butane diol with an NCO/OH(polypropylene glycol)/OH(1,4-butane diol) ratio of 0.8/0.3/0.7. See column 4, Examples. Accordingly, claim 1 is not anticipated by Beyrle.

**Rejections Under 35 USC 103**

Applicants request withdrawal of the rejection of claims 4-8 and 10-12 for obviousness over Saunders in view of Sweeney, because Saunders fails to teach or suggest the polymer of the claims as mentioned above.

Use of solvent adversely affects the formability characteristics (e.g., void) of fiber reinforced plastics, because it is necessary to evaporate the solvent in order to form such a fiber reinforced plastic. Accordingly, the urethane polymer described in Saunders would not be applied to a fiber reinforced plastic.

Regarding the rejection of claims 4-12 for obviousness over Beyrle in view of Recker, applicants believe that it also should be withdrawn, because Beyrle fails to teach or suggest the polyurethane of the claims as mentioned above. Moreover, 1,4-butane diol contained in the polyurethane composition described in Beyrle is a chain extender, which conventionally is an essential component for shape memory polymers. 1,4-butane diol maintains a high glass transition point (Tg) but shortens pot life. See page 18, line 19 to page 19, line 21 of the present specification. Accordingly, the polyurethane described in Beyrle would not be applied to a fiber reinforced plastic.

### **Conclusion**

Applicants believe that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested. The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicants hereby petition for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

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By  \_\_\_\_\_

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